



PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of

Atsushi KANEDA et al.

Group Art Unit: 1783

Application No.: 10/533,449

Examiner: N. GUGLIOTTA

Filed: May 2, 2005

Docket No.: 123699

For: HONEYCOMB STRUCTURE

DECLARATION UNDER 37 C.F.R. §1.132

I, Suguru Kodama, a citizen of Japan, hereby declare and state:

1. I have a degree in material engineering which was conferred upon me by Nagoya University in Nagoya city in 2005.
2. I have been employed by NGK INSULATORS, LTD. since 2005 and I have had a total of 6 years of work and research experience in material development of honeycomb ceramics.
3. I have a professional relationship with the assignee of the above-identified patent application. In the course of that professional relationship, I received compensation directly from the assignee for my work relating to material development of honeycomb ceramics. I am not being compensated for my work in connection with this Declaration.
4. I and/or those under my direct supervision and control have conducted the following tests: In conjunction with Table 2 and Plugging Material No. D of the present specification, the below table further illustrates that the porosity of the plugging material itself is 67 % or greater.

Additional Table

Plugging material No.	SiC powder average particle diameter (μm)	SiC powder blended amount (parts by mass)	Metal Si powder blended amount (parts by mass)	Pore forming agent blended amount (parts by mass)	Young's modulus (GPa)	Strength (MPa)	Porosity (%)
E1	10	80	20	10	2.2	2.5	68
E2	12	80	20	3	5.7	5.3	64
E3	12	80	20	4	3.9	4	67
E4	12	80	20	5	2.4	2.5	69
E5	8	80	20	3	5.2	4.7	61
F	12	80	20	-	5.4	7.4	50
G	12	80	20	-	15	14	48

E1 - E5: change the agent

F: change the binder

G: change the process

I hereby declare that all statements made herein of my own knowledge are true, and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine and/or imprisonment under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing therefrom.

Date: Apr 22, 2011*S. Kodama*

Suguru Kodama